Indian Air Defence as compiled from their sources available on net in USA (library) but not in Pakistan. I have not altered anything only put it in a shape by aligning and gaping...Major retired Aamir Cheema....burjcheema@gmail.com

The history of AD Artillery in India began in 1939, during the Second World War, when the British Government was forced to raise AD units in India to counter the Japanese air threat in SE Asia. Few Indian troops were trained in the use of the 3-inch Ack-Ack gun and later the 40mm L/60 gun, as part of the Anti-aircraft (AA) Batteries of Hongkong and Singapore Royal Artillery (HKSRA) and Indian Artillery. From 1941 onwards, the AA units and training establishments began to be raised in India with Indian Officers and men being posted into these establishments from the Regiment of Artillery and infantry units and later through fresh commission and enrolment.

## **Post Independence**

The policy makers in Britain decided to retain the existing AA TA units for static role tasks and to raise new regular army AA units for the field armies. Consequently, the HAA units were raised for static role against High Altitude Bombers and the LAA units were raised for mobile role against low flying fighter aircraft. The organization of AA units and formations evolved based on gun density requirement for the protection of various Vulnerable Points and Areas. AA defence was meant to be static and was deployed 'en masse' to deter, if not, destroy the enemy, who was also expected to come en mass for bombing of targets. Barrage fire dictated deployment of batteries in layers and rings, providing a form of area defence.

In Jul 1940, AA and Coast Defence Wings were established at Karachi for training of Indian Officers, JCOs and NCOs in the AA techniques. In Aug 1940, an important decision was taken by the British War Office to create an AA branch of Indian Artillery on the concept of TA. On 14 Sep 1940, one Indian AA Technical Training Battery was raised at Colaba, Bombay. It included nucleus of the first AA unit of Indian Artillery - the 'R' (Royal) HAA Regiment. In Jan 1941, Light AA unit called the 'U' LAA Regiment was raised at Malir Cantt (Now in Pakistan) and was equipped with L/60 guns. In Apr

1941, both of these units were re-named and thus 'R' HAA became 1 Indian HAA Regiment IA and 'U' LAA became 1 Indian LAA Regiment IA.

By 1942, when two AA training centers (AATC) were raised, there were eighteen AA regiments (ie nine HAA Regiments and nine LAA Regiments), four HQ AA Brigades, two Independent LAA Batteries and one Independent HAA Battery. By the year 1944, there were a total of 33 AD Artillery units. However, immediately after the Second World War, a large number of these units were disbanded. At the time of partition in 1947, only two AD Artillery units i.e. 26 LAA and 27 LAA Regiments came to India. Neither of the two oldest AA Establishment in India, i.e. I Training Battery and 'R' HAA Regiment survived into Independent India.

The post 1971 era, saw rapid modernisation and mechanization of AD Artillery. Many a state of art and latest weapon system were introduced into service during this period, with the TigerCat Msl System in 1972, the ZSU-23-4B Schilka in 1973, the ZU-23-2B guns in 1976, and the OSA-AK system was introduced in 1985-86. Subsequently the Igla SAM and the Strela-10M missiles were introduced during 1988-89. One of the defining periods in the Corps history was from 1987 to 1994, when the following momentous events took place, resulting in a new identity for the AD Arty:-

Move of AD Wing from School of Artillery from Devlali to Gopalpur and the establishment of Air Defence Guided Missile School (now rechristened as Army Air Defence College) at Gopalpur Military Station in Orissa during Dec 1989.

Fructification of the case for bifurcation from the Regiment of Artillery in Oct 1993, after protracted deliberations and dithering.

The Corps of AD Artillery came into its own on 10 Jan 1994. The Directorate General of Air Defence Artillery started functioning from the same day. Likewise, the AD Artillery branches at the various Command HQs also took birth. The ADGM School at Gopalpur started functioning as an autonomous entity and the AD Wing at Artillery Centre, Nasik Road Camp became the ADGM Centre. The Corps of Air Defence Artillery has been re-designated as 'Corps of Army Air Defence' wef 18 Apr 2005.

The motto of Army AD is "AKASHE-SHATRUN JAHI". The flag of Army AD has two horizontal bands of colours with sky blue colour on the upper half and the red colour at the bottom. The Sky blue colour signifies the background of blue sky against which the Army AD weapons have to operate and the Red colour symbolizes sacrifice and chivalry. The AD crest, designed by NID, Ahmedabad is placed in the centre of the flag, has a surface to air missile in the centre with two radar antennas on either side facing out-wards and emitting radiation.

## **History of AAD Centre**

- Jul 1940. Anti AC (AA) and Coast Def (CD) Wg Est by the British School of Arty at Kakul near Rawalpindi
- 14 Sep 1940. 1 AA Tech Trg Bty formed at Silk Mill at Gun Carriage Basin Colaba Bombay.
- **01 Jan 1941.** AATC of Indian Arty formed by expanding No 1 AA Tech Trg Bty after move from Bombay to Karachi in Dec 1940.
- **01 Jan 1942.** AATC renamed 1 AATC to train Hy AA gunners only. 2 AATC raised From 'B' Regt of No 1 AATC Lt AA WG and moved to Deolali.
- **Apr 1942.** 3 AATC Est at Deolali for recruiting Madrassis for AA raisings.
- **Dec 1942.** 3 AATC mov to Mehgaon near Jabalpur. 1 AATC to train Madrassis and 2 AATC at Deolali to train North Indinan Gnrs and Dvrs.
- **Jun 1944.** 1 and 2 AATCS disbanded and merged into 3 AATC at Mehgaon near Jabalpur to train all categories of AA pers and renamed as the AATC.
- **1946.** All three Indian Arty Trg Centres, AA Fd and Mtn merged to form two new Centres. One near Ambala named as Royal Indian Arty Trg Centre (North) and one at Madukarai near Coimbatore, named as Royal Indian Arty Trg Centre (South) which subsequently moved to NRC and

Secundrabad respectively.

**1948.** Arty Trg Centre loc at Kakul moved to its present loc at Nasik Road Camp. 3 Bty of 1 Trg Regt of Arty Centre was third bty having a tp with 16 guns.

**22 Feb 1969.** AD Wg raised at Arty Centre, Nasik Road under Lt Col PS Bakshi.

**10 Jan 1994.** Consequent to bifurcation of AD Arty, AD Wg was seperated from Arty Centre.

**15 Nov 1994.** ADGM Centre raised under the stewardship of Col RJS Sodhi.

**Dec 1994.** AD Arty records bifurcated from Arty Records with Lt Col RPP Kurup as the first CRO.

**01 Dec 1999.** ADGM Centre re-designated as Air Defence Artillery Centre.

**01 Apr 2004.** AD Arty Depot Bty bifurcated from Arty Depot Regt with Maj S Kekre being the first AD Arty Depot Bty Cdr.

**18 Apr 2005.** Air Defence Artillery Centre re-designated as Army Air Defence Centre.

Oct 2008. Army Air Defence Centre shifted to Gopalpur.

# **Indian Army Air Defence College**

#### **Takshasila**

Takshasila is an important archaeological site of Ancient India and is currently in modern-day Pakistan. It contains the ruins of the Gandharan city of Takshasila (also Takkasila or Taxila) an important Vedic/Hindu and Buddhist centre of learning from the 6th century BC to the 5th century.

The `seat of learning` for all students. This new training block provides state-of

-art facilities for conducting classroom training. it encompasses state of art class room, training labs and faculty offices. it acts as a central hub for controlling all training actives.

### Kurukshetra

Kurukshetra is a place of myths, legends, great battles, empires and the canvas of the epic Mahabharata. It is also the birth place of the most sacred text of the Hindus, the Bhagwad Gita. For centuries it has been considered the battle ground of the brave.

The complex where theoretical and practical knowledge amalgamate. It has training ground, simulators, equipment stripping rooms, and classrooms. Essentially the 'On Ground' training is imparted here.

### **AIMA Auditorium**

The auditorium has been named after late Maj Sushil Aima, KC who sacrificed his life while fighting militants in a dense forest near village Kopra, District Poonch, J& K to repulse an attack on army post. The fully air conditioned auditorium is being used extensively for conduct of Central Lectures, Guest Lecture and Presentations under Knowledge Development Programme.

### **Srikumar Hall**

The conference hall at Army Air Defence College has been christened on the name of Late Maj P Srikumar, KC, who sacrificed his life while leading a Ghatak Platoon in 'OP SCORPION' undertaken by 27 RR Battalion. The hall is equipped with state of art environment control and high resolution projection system. All seminars and conferences are held here.

## **Partap Hall**

Partap Hall is the Motivational Hall of Army AD College. All major events like opening and closing address of all courses of instruction being conducted at Army AD College are held here. The names of winners in various courses are written in golden letters on the honour boards.

# **Chandragupta Hall**

Chandragupta Maurya, known simply as Chandragupta was the founder of the Maurya Empire. Chandragupta succeeded in bringing together most of the Indian subcontinent. As a result, Chandragupta is considered the first unifier of India and the first genuine emperor of India.

A state of the art Sand Model Discussion Room aptly named Chandragupta Hall has been made in the Kurukshetra Training Complex, which is equipped with the latest audio-visual training aids.

### **Class Room Variants**

Space has always been a constraint to impart training on Army Air Defence Radars. Army Air Defence College Boasts of first of its kind fully functional CRVs of USFM, Schilka, Flycatcher and REPORTER radars. These CRVs are being extensively used to impart realtime training to the entire class Simultaneously.

### **Simulators**

Extensive use of simulators is being made to impart training to students. The simulators of Tunguska Gun Missile System and L/70 Gun Systems have been recently installed at Kurukshetra.

## **Equipment Stripping Room**

Working models, cut sections, sectionised parts and actual parts of the gun systems are available in the ESRs of L/70 and Zu 23mm gun systems to enable students to get hands down training

# **Computer Lab**

Consisting of 30 work stations to provide a one to one student to machine ratio. Internet and LAN facility is available. Sectionised models of hardware are displayed to teach configurations of computers.

### **Electronic Lab**

Equipped with state of the art experimental equipments and demonstrators for radar system, electronic warfare systems, digital and analogue electronics, fibre optics and communication systems including satellite communication.

## **Control & Reporting Complex**

It provides training on the Tactical Air Defence Integrated Display System. Here an operator gets trained to carry out threat evaluation, target prioritization, weapon designation and to pass data duly corrected for parallax.

### **Combat Simulator Room**

Combat Simulator Room is an integrated simulation and training package incorporation Control and Reporting and Electronic Warfare (Non Communication) functions. It is used to provide training to radar and weapon system operators for engagement of multiple aircrafts in intense Electronic Warfare environment.

### **Low Power Jammer**

Two state of the art and automated Low Power Jammers to provide jamming signal to various radars held by Army Air Defence, by employing different noise and deception jamming techniques. The system is used to train radar operator to work under Electronic Counter Measure environment.

# **Gopalpur Seaward Firing Ranges**

Army Air Defence College had an excellent Seawards Firing Range where all types of Army Air Defence Weapon System can be fired. Its availability as a part of the campus enables live firing practice to validate the theoretical knowledge imparted. The range has been recently re-notified and extended to 75 kms, to facilitate the firing of all types of Army Air Defence Weapon Systems.

Target support for various Air Defence Weapon System is provided by indigenously development Inter Services Pilotless Target Aircraft (ISPTA) Lakshya.

### **Nalanda Library**

Nalanda was a Buddhist center of learning from 427 BC to 1197 BC. It has been called "one of the first great universities" in recorded history. Nalanda was one of the world's first residential universities. The university was considered an architectural masterpiece. The library was located in a nine storied building

where meticulous copies of texts were produced. Hence the library in the college is called the Nalanda Library.

'Reading Maketh A Man ' so goes an old age adage. Books and reference material on a plethora of topic catering to myriad requirements have been made available at the Central Library 'Nalanda'. For the cyber savvy internet connections are also available.

### **Adventure Activities**

Army Air Defence College is also an Aqua Node of Army Adventure Cell. Chattarpur Lake (20 Kms) from the college campus is the hub centre for all aqua adventure activities to include Sailing, Water Skiing, Rowing, Water Scooters and Para Sailing.

### **Organisation**

- Home
- History
- Commandant
- Previous Commandants
- Infrastructure
- Photo Gallery
- How to Reach
- About Gopalpur